98-84400-1

Anisimov, ´I`Akov Anisimovich

Soviet state farms and specialization in...

Moscow, U.S.S.R.

[1930]

98-84400-1
MASTER NEGATIVE #

COLUMBIA UNIVERSITY LIBRARIES
PRESERVATION DIVISION

BIBLIOGRAPHIC MICROFORM TARGET

ORIGINAL MATERIAL AS FILMED - EXISTING BIBLIOGRAPHIC RECORD

308
Z
Box 688 Anisimov, Fȧkov Anisimovich, 1897–

Soviet state farms and specialization in agriculture, by J. Anissimoff ... International conference of agricultural economists, Cornell university, Ithaca, New York, August, 1930. Moscow, The Lenin academy of agricultural sciences [1930]

39 p. 19½cm.

Folded map inserted.

1. Agriculture and state—Russia. 2. Agriculture—Economic aspects—Russia. I. Vsesoiuznafi akademifi sel'sko-khozfiistvennykh nauk imeni V. I. Lenina. II. Title.

44-20532

Library of Congress HD1993.1930.A6

[2] 338.12

RESTRICTIONS ON USE: *Reproductions may not be made without permission from Columbia University Libraries.*

TECHNICAL MICROFORM DATA

FILM SIZE: 35MM REDUCTION RATIO: 10:1 IMAGE PLACEMENT IA (IIA) IB IIB

DATE FILMED: 4-16-98 INITIALS: PB

TRACKING # : 29751

FILMED BY PRESERVATION RESOURCES, BETHLEHEM, PA.

BIBLIOGRAPHIC IRREGULARITIES

MAIN ENTRY: Anisimov, I Akov Anisimovich

Soviet state farms and specialization in agriculture

Bibliographic Irregularities in the Original Document:

List all volumes and pages affected; include name of institution if filming borrowed text.

_____ Page(s) missing/not available: _____

_____ Volume(s) missing/not available: _____

_____ Illegible and/or damaged page(s): _____

_____

_____ Page(s) or volume(s) misnumbered: _____

_____ Bound out of sequence: _____

X Page(s) or volume(s) filmed from copy borrowed from: Cornell University
(entire pamphlet)

_____

_____ Other: _____

_____

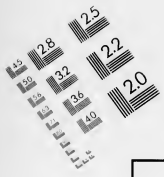
_____ Inserted material: _____

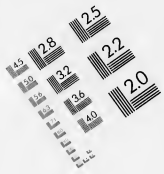
TRACKING#: MSH29751

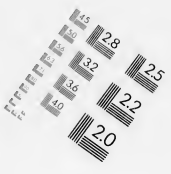
FILMED IN WHOLE
OR PART FROM A
COPY BORROWED
FROM:

CORNELL
UNIVERSITY

PM-MGP
METRIC GENERAL PURPOSE TARGET
PHOTOGRAPHIC

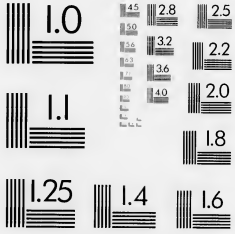






150 mm

100 mm



ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz1234567890

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890

1.0 mm

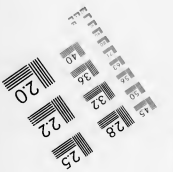
1.5 mm

2.0 mm

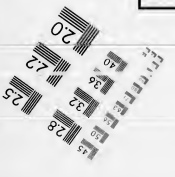
2.5 mm

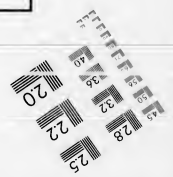
A5

A4



PRECISION℠ RESOLUTION TARGETS





A&P International
2715 Upper Afton Road, St. Paul, MN 55119-4760
612/738-9329 FAX 612/738-1496

S
494
R9
A5
c. 2

ERT R. MA
LIBRARY
AT
CORNELL UNIVERSI

CORNELL UNIVERSITY LIBRARY
3 1924 063 874 972

DATE DUE

NOV 1 1 1987

GAYLORD PRINTED IN U.S.A.

ERT R. MA
LIBRARY
AT
CORNELL UNIVERSI

In compliance with current
copyright law, Mann Library at
Cornell University produced
this replacement volume on paper
that meets the ANSI Standard
Z39.48-1984 to replace the
irreparably deteriorated
original.

1992

S
414
A5
G2

S414
A1A5

Soviet State Farms and Specialization in Agriculture

By

J. ANISSIMOFF

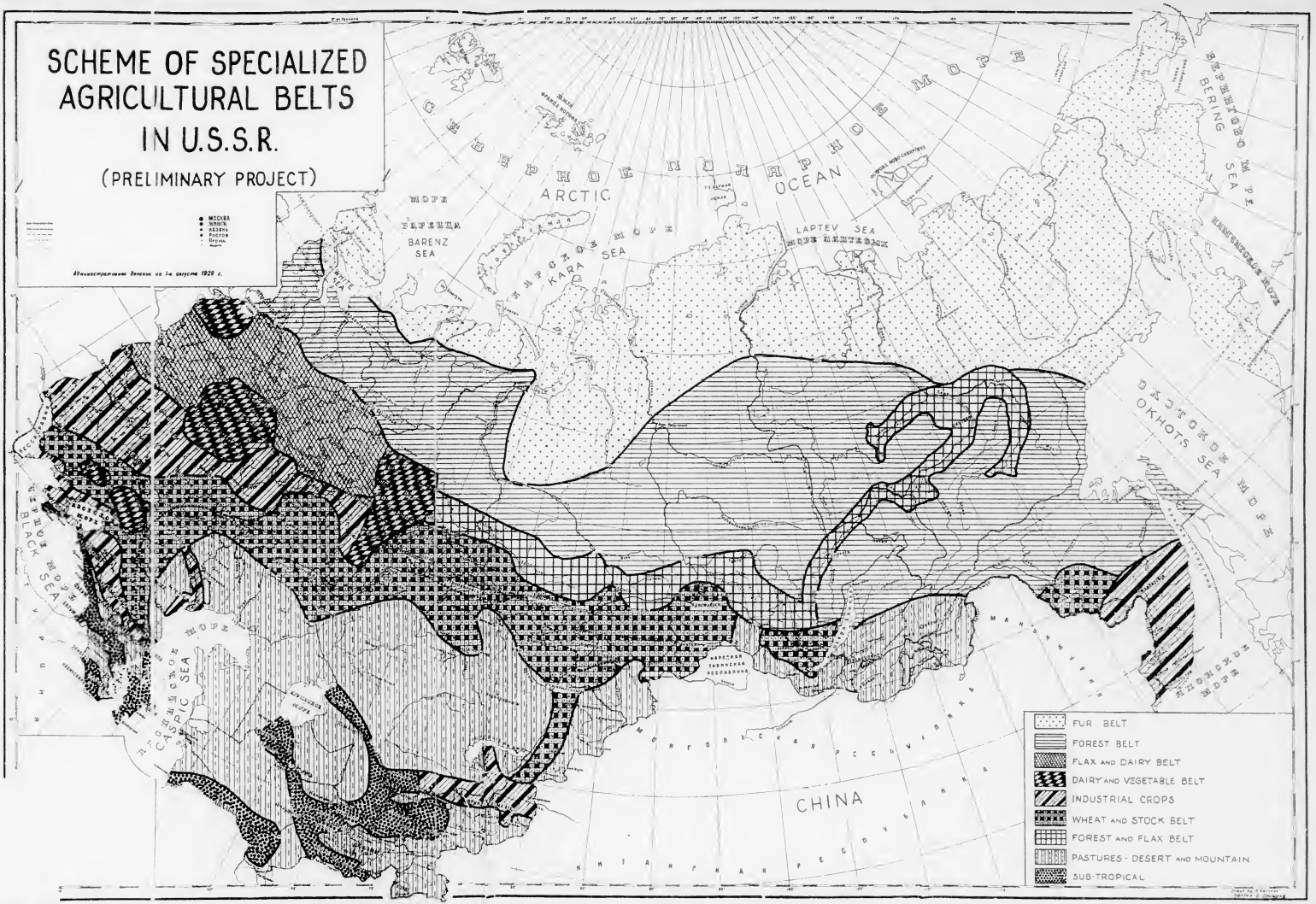
Director, Institute of Large-Scale Farming, Moscow

INTERNATIONAL CONFERENCE OF AGRICULTURAL ECONOMISTS

Cornell University, Ithaca, New York
August, 1930

PUBLISHED BY THE
LENIN ACADEMY OF AGRICULTURAL SCIENCES
MOSCOW, U. S. S. R.

C469
R9A5
v.2


SCHEME OF SPECIALIZED AGRICULTURAL BELTS IN U.S.S.R.
(PRELIMINARY PROJECT)
ARCTIC OCEAN
BARENZ SEA
KARA SEA
LAPTEV SEA
BERING SEA
OKHOTS SEA
BLACK SEA
CASPIC SEA
CHINA
FUR BELT
FOREST BELT
FLAX AND DAIRY BELT
DAIRY AND VEGETABLE BELT
INDUSTRIAL CROPS
WHEAT AND STOCK BELT
FOREST AND FLAX BELT
PASTURES - DESERT AND MOUNTAIN
SUB-TROPICAL

I
ORGANIZATION OF STATE LARGE-SCALE FARMING

The question of the organization of large-scale farming in the U. S. S. R. by state enterprises was taken up as a practical proposition in the very first years of the existence of the Soviet regime. In the years 1918-1920 over 3,000 farms were formed of what had remained of the former landowners' estates. After the introduction of the New Economic Policy (N. E. P.) the majority of the state farms were combined into trusts organized on a regional, republican and federal scale. As the restoration of industry, transportation, agriculture and the general economic structure of the U. S. S. R. gradually progressed, the state agricultural enterprises grew in importance, both as producers of raw materials, blooded-stock, seed and plants, and as models of large-scale socialistic enterprises with a comparatively high technical level.

The first years of the New Economic Policy saw the inception of vast combinations of large-scale state farms, such as the Sakharotrest (Sugar Trust) and the Gosselsyndicate (State Agricultural Syndicate), the latter combining thirty or forty regional, republican and special agricultural trusts.

During the years 1926-1928, the system of state farms was comprised of the following organizations: (1) Sakharotrest; (2) Ovtzevod (Sheep-breeding Trust); (3) Glavkhlopkom (Chief Cotton Committee); (4) the Kenaf Trust and (5) Gosselsyndicate. The total agricultural area embraced in state farms,

whether combined into trusts, or functioning outside the trusts under the control of local land organs and other departments, amounted to about 3 million hectares.

In the year 1928 the state farms produced about 4 or 5 per cent of the total marketable crops of the country. With the beginning of the period of the reconstruction of national economy in general, and of agriculture in particular, the upbuilding of state and collective farms was given an exceptionally strong impetus. In 1928 the foundation was laid, on an enormous scale, for the organization of the system of state grain farms on such free state lands as were suitable for grain production.

In the summer of 1928 the Soviet Government passed a decree establishing the All-Union Trust of Grain Farms ("Zernotrest"), and at the same time the operations of the state farms, combined into such trusts as the Ovtzevod, the Sakharotrest, the Gosselsyndicate, the Glavkhlopkom, the Kenaf Trust, and others, were expanded on a large scale. In 1929 there was created, primarily on free state lands, and partly on already existing state farms, the largest state-owned cattle trust, the Skotovod (Cattle-breeding Trust). Next followed the establishment of the All-Union Hog-breeding Trust (Svinovod), the Dairy Trust (Maslotrest), the Dairy-Truck Trust, and others.

At present the system of state farms comprises the following:

(1) the state farms of the Zernotrest (Grain Trust), with a total area of about ten million hectares and with a sown area of about one million hectares (1930);

(2) the state farms of the Skotovod (Cattle-breeding Trust), with a total area of about ten million

hectares and with close to three million head of cattle (1930);

(3) the state farms of the Ovtzevod (Sheep-breeding Trust), with a total area of from three to four million hectares and with one to two million head of sheep;

(4) the farms of the Sakharotrest or Soyuzsakhar (United Sugar Industry), with a total area of about one million hectares;

(5) the ranches of the Svinovod (Hog-breeding Trust), which are expanding their work of developing big herds, aiming at a total of 200-300,000 head of breeding sows;

(6) the state farms of the Maslotrest (Dairy Trust), which are being formed partly on new lands and partly on already existing state farms, the latter being organized with a view to specialization;

(7) the state farms of the Dairy-Truck Trust, which partly are constituted by farms controlled by regional trusts, and partly are organized on free state lands in close proximity to big industrial centers;

(8) the state farms of the Kenaf Trust, with an area of about 50,000 hectares;

(9) the state farms of the Glavkhlopkom (Chief Cotton Committee), with an area of 100,000 hectares;

(10) the state farms of the Lnotrest (Flax Trust), with an area of 200,000 hectares;

(11) the state farms of the Risotrest (Rice Trust), with an area of about 200,000 hectares;

(12) the state farms of the Seed Trust, with an area of about 200,000 hectares;

(13) state farms belonging to different institutions and organizations and not forming a part of any trust, with an area of about 200,000 hectares.

Thus, the state agricultural enterprises of various

types of production embrace an agricultural area of about 25-27,000,000 hectares.

The development of state industry on a great scale and the simultaneous rapid growth of large-scale farming have given rise to a number of problems, both scientific and practical in character, in regard to the organization of agricultural enterprises. The evolution of agriculture in the principal countries of the world in the course of the last centuries, just as the evolution of other branches of national economy, clearly illustrates the dependence of the organization of farming, first upon the social-economic relations prevailing in a given country; second, upon the general technical level and, in particular, upon the improvements in machinery and implements that industry makes available to agriculture; third, upon the level of agronomic knowledge in the fundamental branches of agriculture. From the point of view of these three primary forces, which determine the character and the scope of agricultural enterprises and of agriculture as a whole, conditions in the Soviet Union are exceptionally favorable for agriculture. The social-economic system prevailing in the U. S. S. R., with the land nationalized and agricultural economy operated in accordance with a general plan, is more propitious for the organization of very large and specialized enterprises in all branches of agriculture than any other system known in history. The most important of these favorable conditions may be summarized as follows:

(1) the rational organization of agricultural territory, unrestricted by private ownership of land and the resulting claims of the owner;

(2) the great possibilities available under a system

of planned economy for the mobilization of state funds for large-scale agricultural enterprises;

(3) the training of an adequate personnel of experts in accordance with a plan;

(4) the adaptation, under a general plan, of the construction of agricultural machinery to the needs of large-scale specialized agriculture;

(5) the direct interest of the working class in the development of state agricultural enterprises as well as of enterprises in other fields of national economy.

The modern technical achievements in regard to power, machinery and implements that are available to agriculture (the internal combustion engine, the steam engine, the electric motor, the combine, tractor-drawn attachments), as well as the progress attained in scientific knowledge of plant, fruit and garden culture and animal husbandry, permit the organization of large specialized agricultural enterprises of the type of production units in industry. The basic problems of organization of agricultural enterprises of the state-owned type—problems relating to the type and scale of farming—are as follows:

(1) The basic principle of organization of state farms in all branches is specialization. The main lines of production of the state farms and their territorial distribution are determined by the leading central organs (People's Commissariat for Agriculture and the various trusts). The deciding factors in this respect are:

(a) the requirements of national economy for the products of agriculture (raw materials, grain, animal products, etc.);

(b) the productivity of labor and production costs, including transportation costs).

(2) the size of agricultural enterprises is determined in each specialized type of farming by such a rational organization of the basic means of production as will result in the lowest expenditure per unit of production and in the highest productivity of labor. In other words, the deciding factors in regard to the size of a given agricultural enterprise are: the level of technical development and the nature of the principal means of production to be used and which afford the basis for the enterprise. Neither rent nor private ownership of land, which determine the type and size of the farm units under capitalist conditions, enter into consideration in the conditions prevailing in the U. S. S. R.

For the group of state farms controlled by the Grain Trust in 1929, the average size of a farm was 56,100 hectares (the aggregate area of the 121 state grain farms was 6,792,000 hectares); 73 per cent of all these farms had an area of over 40,000 hectares each. In individual instances farms of the Zernotrest group reach as high as 100,000 hectares and more, as, for instance, the "Gigant" (Giant) farm which now embraces an area of 170,000 hectares, of which 120,000 are under cultivation.

Farms on a similar scale are being organized in Kazakstan, in Siberia, in the Lower Volga Region and elsewhere. It has been proven by experience gained since the very first year of the operation of state farms that, all other conditions being equal, the cost of production per unit is lowest on the largest farms. In 1929 the cost of production on the "Giant" farm, with an area of 130,000 hectares, was estimated at 5.24 rubles per centner (1/10 metric ton) of winter wheat, with a yield of 10.06 centners per hectare; the cost of spring wheat was 5.51 rubles per centner, with a

yield of 9.10 centners. On an experimental state farm, with an area of about 50,000 hectares, the total cost of production of spring wheat was estimated as 7.09 rubles per centner.

The basic principles underlying the organization of state grain farms are as follows:

Every state farm has a centralized group of farm buildings conveniently located with reference to means of communication, railways, waterways, etc., and to the entire agricultural area of the farm. This central group comprises, as a rule, a machine repair shop for major repairs on tractors and attachments, vehicles, and other implements, a fuel and lubricants base, garages, machinery sheds for storing tractors, automobiles, and other heavy machines and implements, dwellings for workers and directing technical personnel, etc.

The area of a state grain farm is divided into sections of 6, 10 or 12 thousand hectares each. All the machinery required for work in each section—tractors, attachments, combines and trucks—is located within the sections, as well as a supply of fuel and oil, light summer dwellings, seed storage granaries, carts and tents. Upon the termination of all the agricultural operations in the section the tractors and other machinery and parts that are in need of capital repairs are transported to the central inspection and repair shops. Implements and machines not in need of major repairs remain in the section under cover until the following agricultural season.

The sections in which the various agricultural operations, such as plowing, sowing or harvesting, are carried on are divided either into permanent squares of 4 square kilometers or 400 hectares each, or else, much more commonly, these subdivisions are estab-

lished only for the various successive operations, plowing, sowing and harvesting. The square serves as a basic accounting unit for all farming operations and as a unit for supervising the work and for observing the condition of the crops.

The organizational basis is centralized direction in regard to organization and technique; a central office with an accounting and bookkeeping apparatus; a central, well-equipped repair shop (with assembling, machine, forge and foundry departments) with a highly qualified engineering, agronomical and clerical staff concentrated in the central office of the farm. The problem of this central office is to plan all agricultural operations, to allocate the work among the various sections, to assure the necessary repairs and the high quality of performance of all means of production, to provide for technical instruction, control and supervision of all operations, and to maintain connections with the trusts. The actual operations are carried on in the several sections which are connected with the central establishment by telephone and automobile communication.

With this system of organization the expenses of maintaining a well-equipped repair shop with a highly qualified engineering and technical staff, a central office, a highly qualified personnel of supervisor-agronomists, headed by a director, are the smallest per unit of production in the larger grain farms; and the capital investment required per unit of agricultural area is likewise considerably lowered on these farms. On the large grain farms all capital investments, including implements, buildings, roads, irrigation, amount to only 40, 50 or 60 rubles per hectare of farm land.

Besides, this system assures a more rational utilization of the highly qualified engineering and agronom-

ical personnel. The costs of transportation are cut down to a minimum by (a) decentralization of the actual farming operations in the several sections; (b) cutting down the transportation of implements to the central establishment, inasmuch as current repairs are done on the spot in traveling shops; (c) the establishment of telephone connections between the several sections and the central office.

The marketable portion of the crop is often transported directly to the nearest railway station or port, where grain elevators are provided for the purpose, without touching at the central establishment.

Thus, the main factors in determining the most economical size of the state-owned types of agricultural enterprises are the means of production (tractors, machines, implements, shops and the extent of their utilization, buildings and general equipment) and the organization of the personnel, especially of the engineering and agronomical staff.

The lower the outlay of an enterprise for investments in basic capital and for labor maintenance, the more rational is the latter. The production outlays have proved lowest and the degree of utilization of mechanical power, implements and buildings highest on the largest state farms. It should be observed, however, that the most economical size of a grain farm can not be determined as yet, though there can be no doubt that with a developing technique, with accumulated experience, with the training of an adequate personnel, with improvements in means of communication and their development, the most economical size of a state farm will be far in excess of the biggest grain farm now in existence.

Of the Ovtzevod (sheep-breeding trust) farms there

were in 1929 63, with a total area of 3,302,300 hectares, the average size of each farm being about 52,000 hectares and the average number of sheep from 10,000 to 20,000. The total number of sheep in 1929 on all these farms was 1,200,000. During the current year this number will be at least doubled.

The principle of centralized farms, subdivided into sections, is practiced also on the state sheep-breeding farms. An extensive system of cattle-breeding farms has been organized, chiefly to produce beef cattle. In a short time this system has grown to about one hundred farms which will have 3,000,000 head of cattle towards the end of the current year (1930). These are also being organized on the principle of large-scale farming, each farm occupying an area of 50,000, 100,000, 150,000 hectares or more, and subdivided into sections.

The large dairy farms which supply Leningrad, Moscow, Nizhni Novgorod, Kharkov and other industrial centers with milk are organized as large milk factories with purchased supplies of feed, and as many as 1,000 to 2,000 cows are concentrated on a single farm. The dairy farms which were established on the estates formerly owned by the big landlords and which have been in existence for over ten years, are mostly small, with an acreage of 500 to 2,000 hectares per farm, and with from 100 to 300 dairy cows each. The total number of dairy cattle on these farms in 1929 was 100,000. Notwithstanding the small size of these state farms, their lack of specialization, and their scattered location throughout the country, they have almost tripled the productivity of their dairy herds as compared with that of the dairy cattle of individual peasants. On practically all of these state farms the average annual yield per cow has reached 2,700 to 3,000

kilograms of milk, and some farms have attained much better results. The cost of milk production on these farms amounts to 8 or 10 rubles per centner, which is approximately from one-half to one-third that of the individual farmer. The success of these small state dairy and cattle farms is due mainly to an increase in the area sown to feed crops (forage, grasses, root crops) to improved rations (such as wider use of concentrated feeds), to rationalized methods of general care, and to herd improvement.

This experiment with small state farms tends to show the opportunities presented by large dairy farms with one, two, or several thousand head of dairy cattle. By means of a general mechanization of the basic processes of the dairying economy—the preparation of feed, the feeding, handling and milking of the cows—it is possible to reduce operating expenses greatly and to improve considerably labor productivity. On the existing comparatively small farms, the average number of cows per worker is 7 to 10, whereas on the large, mechanized farms it is possible to triple and even quadruple this ratio, and it can be done without any considerable intensification of the work but mainly as a result of mechanization and rationalization.

The organization of these large-scale dairy farms, which are equipped for the distribution of fresh milk as well as for the production of butter, cheese, and other dairy products, was started by the Soviet Government in 1929. During the current year a number of large dairy farms are being organized under the direction of the Dairy and Dairy-Truck Trusts. As a result of the organization of these farms, much experience will be gained with regard to these special types of large-scale state economy.

In 1929 the United Sugar Industry of the Soviet

Union (Soyuzsakhar) had under its control 190 farms with a total area of about 1,000,000 hectares and an average acreage of 5,000 hectares per farm, including ten farms with an average of 10,000 to 20,000 hectares each. All these farms naturally employ intensive methods of cultivation, 20 to 28 per cent of the total acreage being devoted to sugar beets, and are combined with the breeding of dairy and meat cattle and with the production of sugar at their own sugar mills. The total capital investment in the farms of the Sugar Trust, exclusive of the sugar mills, amounts to between 150 and 250 rubles per hectare under cultivation.

The rapid growth of state economy (state farms) in all the major branches of agricultural activity, combined with the collectivization movement, raises numerous scientific and practical problems concerning the organization of large agricultural enterprises. In addition to the purely technical questions of acreage, labor force, mechanization, power, machinery and methods of production, there is also the extremely important and involved economic question as to the most rational territorial distribution of the various branches of agriculture and the most effective specialization of agricultural production.

II.

SPECIALIZATION IN AGRICULTURE IN THE U. S. S. R. AND ITS TERRITORIAL DISTRIBUTION

On the basis of the great successes achieved in the industrialization of the country and the socialization of peasant economy and the development of state farms connected with these successes, agriculture in

the U. S. S. R. is rapidly developing its productive forces in the direction of the most rapid extension of grain production, both for domestic consumption and export, the extension of the production of technical crops, such as sugar beets, flax, hemp, cotton, kendyr, kenaf, sunflower, soy beans, etc., the development of animal breeding and the production of fruits and vegetables.

Comparative statistics of the areas sown to the most important industrial crops in each of the last four years and in 1913 afford an adequate idea of this development.

Area Under Major Industrial Crops in U. S. S. R. in 1913 and 1927-1930

	1913	1927	1928	1929	1930
COTTON—					
In thousand hectares	701.0	753.2	917.4	1061.3	1767.0
In percentages	100.0	107.4	131.0	151.4	252.1
SUGAR BEETS—					
In thousand hectares	621.0	720.0	855.0	876.0	1114.0
In percentages	100.0	115.8	137.5	140.9	179.1
FLAX—					
In thousand hectares	1857.0	1580.0	1733.6	2054.7	2090.6
In percentages	100.0	85.0	93.0	110.0	112.5
HEMP, SUNFLOWER & OTHER OIL SEEDS—					
In thousand hectares	2229.0	3995.0	5179.0	4951.0	4788.8
In percentages	100.0	172.2	232.4	222.1	214.3
TOBACCO—					
In thousand hectares	66.6	82.7	79.7	85.6	98.9
In percentages	100.0	125.3	120.8	129.7	149.8
TOTAL INDUSTRIAL CROPS—					
In thousand hectares	5475.0	7131.5	8767.5	9025.7	9856.7
In percentages	100.0	131.2	160.1	164.8	180.0

The sown area under cotton has thus increased two and a half times during the last few years; that under the oil seed crops (sunflower, hemp, etc.) has more than doubled; that under sugar beets has gained 79 per cent; the area sown to tobacco has increased by 50 per cent, while the total area under industrial crops has increased by 80 per cent. These figures throw light upon the nature of the shiftings and improvements, fostered by the policy of the Soviet Government, that have taken place in agricultural production in the U. S. S. R. since the revolution.

In 1930 the area sown to grain approached the pre-war level: in 1913 the area sown to all grain crops within the present confines of the U. S. S. R. was 102.7 million hectares, and in 1930 the area under all grain crops was 102.1 million hectares.

The increase in production of the chief branches of agriculture organized on a socialist basis requires enormous accumulations of capital within the industry itself. The process of socialization of agricultural production creates favorable conditions both for such accumulations and for increased production.

The development of agricultural socialization and the use of power implements creates huge possibilities for the reclamation of new arable lands and for the better utilization of the land under cultivation. The area sown to hay and root crops is constantly increasing, and meadows and pastures are being improved. In 1927, for instance, there were 3 million hectares under cultivated grasses and in 1929 the area increased to 5 million. There are also great possibilities for future progress, both as regards quality and quantity, in truck gardening, cultivation of melons, grapes and fruits.

If we add to this the necessity for a maximum expansion in the near future of animal husbandry (hog raising, poultry, sheep and cattle breeding), we have a complete picture of the important changes now taking place in all branches of agriculture in the U. S. S. R. All this is transpiring on the basis of a gigantic development of collective and state farms, and involves a huge reconstruction program requiring enormous investments in the main branches of agriculture and for the construction of industrial plants serving agriculture: oil seed factories, packing houses, linen mills, potato flour mills, sugar factories, etc.), and for transportation facilities.

Along with the reorganization of agricultural production, there is also taking place a reorganization in the field of agricultural scientific and experimental work and of agricultural education, both lower and higher. With the reconstruction of agriculture proceeding at such a tremendously rapid pace, both as regards its social forms (collective and state farms), and its production and technical methods, there arises a question of great complexity and importance, namely: what kind of crops to raise and where to raise them.

The U. S. S. R. cannot develop the various branches of agriculture in an haphazard manner without a unified national economic plan. A very carefully planned coordination of the various branches of agriculture as well as a coordination of agriculture and industry is imperative. The development of industry in the old and new industrial centers will in a great measure determine the development of agriculture.

In some cases, the development of industrial crops (sugar beets, potatoes, flax), will determine the location of industrial plants utilizing these crops as raw

materials. The question of mapping out in the most rational manner zones for the main branches of agriculture already requires at least a partial solution, even at the present stage of agricultural development in the U. S. S. R.

With the introduction of new industrial crops and with greatly increased plantings of the old ones (flax, cotton, sunflower, sugar beets, corn, potatoes, and others), with the necessity for a rapid development of the basic branches of animal husbandry, and with enormous possibilities for raising the economic importance of our outlying regions (Central Asia, Siberia, Far East, the northern regions) the problem of a rational distribution of crops as to localities assumes primary economic importance. Such an allocation will serve as a planning base for a rational social distribution of labor among the varoius regions of the Union. This will serve as the main basis for specialized agricultural production.

Agriculture in the U. S. S. R. had comparatively little of either technical or social division of labor. Specialization of production hardly touched agriculture.

Although capitalist methods of marketing of agricultural products were developed to a considerable degree before the revolution, and although these methods were to some extent restored during the N. E. P. period, the character of agricultural production remained to a considerable degree primitive, due to the small size of the basic mass of peasant households, the heritage of pre-revolutionary feudal relationships and the resulting backwardness of our technique, and to a number of other causes.

During the period of the industrialization of our

national economy and of the extensive social, organizational, and technical reconstruction of our agriculture in the direction of a radical remodeling of the basic mass of our poor and middle peasant households, by way of socializing the means of production, of organizing large socialized farms and of developing state farms in all the main branches of agriculture, the problem of *specialized agricultural production* appears as one of the main prerequisites for the development of our productive forces on the basis of socialist construction, and as *one of the problems requiring immediate solution.*

Socialist reconstruction, overcoming the backwardness of technique and organization, introduces extensively a system of division of labor, planned on a national scale on the basis of a single national economic plan, and creates all the necessary conditions for a high degree of specialized production.

Specialization in agriculture must be regarded as a method of adapting agriculture to the types of industry in the various regions, and as a way of concentrating the means of production through the introduction of intensified methods of work. Specialization as a process develops irregularly and depends upon the degree of socialization, upon the state of development of the productive forces, upon the technique and organization of production, and also upon the growing and changing needs of the population. At the same time, specialization in agriculture, based upon a rational division of labor between the various regions and also within the region, serves as a strong stimulus for the development of the productive forces of agriculture, and as a necessary prerequisite for a rapid introduction of the latest achievements of science and technique.

The problem of specialization in agriculture in the U. S. S. R. is at the present time of paramount importance. Through specialization, on the basis of socialization, it is possible to overcome in the shortest time the backwardness of technique and organization, and to advance rapidly the development of the productive forces. At the same time, the introduction of more perfected technique into agricultural production inevitably spells specialization of production. High technique in any branch of agriculture (grain crops, industrial crops, dairy and beef cattle, hog raising, poultry, etc.) requires specialized machines and implemnts, special buildings, groups of agricultural and technical specialists, and in each branch rational standards of production, adapted to the leading branch of agriculture and to the technical methods used.

The primitive diversified type of farming is being overcome by high technique. Without inter-regional specialization, and without specialization within the region, it would be difficult to establish a proper proportion among the various branches of agriculture and to solve the problem of the most expedient way of making investments for equipment, from the point of view of satisfying the demands of the national economy, as well as from the point of view of returns on investments. All these considerations demand a thoroughgoing rationalization of agricultural production in the direction of eliminating small-scale farming, and of specialization in accord with economic and natural conditions. The rational utilization of enormous natural possibilities under a variety of economic conditions can be properly organized only through the wide introduction of inter-regional division of labor and specialization of production. In other words, the transition in agriculture from small-scale to socialized

production, organized on the basis of the latest achievements of technique and science, must proceed under the slogan of specialization of agricultural production. This will make it possible to assimilate in a comparatively short period the advanced technique in the field of agricultural production and, at the same time, will serve as a new stimulus to agricultural science, machine-building, engineering, and in general to scientific and technical advancement.

Specialization in agriculture under conditions of capitalist economy, as an expression of the uncontrolled social and technical division of labor, proceeding under the influence of technical development, of higher productivity of labor, and of the expansion of national economy, is characterized by a natural confinement of certain branches of farming to definite localities. This localization proceeds in an uncontrolled manner under the pressure of the laws of capitalist economy: rates of profit, scale of wages, etc. The recognition of the definite types of specialized farming which have thus been formed, and the combining of production units within the regions constitutes the zoning problem under conditions of capitalism.

Specialization in agriculture, as a progressive principle for the development of the productive forces, proceeds under conditions of capitalism in an elemental manner and only by overcoming obstacles inherent in capitalist economy, such as the instability of the market and private ownership of the means of production and of land. Under the economic conditions of the U. S. S. R., specialization of production in agriculture finds a favorable ground for its development. For this reason, specialization must find most extensive application in the reconstruction of agricultural production.

The nationalization of land, the socialization of the

basic means of production, the leading role of the proletariat in a socialized and planned industry, are the basic factors which offer exceptional opportunities for a rational organization of the entire system of agricultural production as a sector of national economy.

The main principles of specialization of production in agriculture are:

1. A considerable degree of socialization of agriculture.

2. A high technical level of socialized agriculture. The new technique, in the form of internal combustion engines, complex machines and implements, electrotechnical power, chemical fertilizers, plants for the working up of agricultural raw materials, must find wide application in large-scale socialized agriculture. The popularization of the achievements of technique and science in the field of agriculture, plant propagation, animal husbandry, will also be of great importance.

3. Agriculture is a part of the national economy, and is most closely bound up with socialized industry.

One of the main questions in connection with the problem of specialization, the question of correlating the various branches of agriculture, will be more or less satisfactorily solved only in the course of a few years. In solving this question we must take into consideration, in the first place, the demands to be made upon agriculture by our national economy during the next few years and, in the second place, the present condition of agricultural productive forces and the possible rate of development in the coming period, considering the conditions of our national economy. Under such conditions it will be possible to solve the problem of correlating the various branches of agriculture

for a definite time period (3-4 years) and also of their geographical distribution.

The criteria for a rational distribution of the various branches of crop raising, animal husbandry, poultry husbandry, vegetable gardening, and fruit culture are: the productivity of labor, cost of production and of marketing (transportation).

The distribution of the basic branches of agriculture geographically with a consideration to the question of maximum productivity of labor and lowest production and marketing costs, means the solution of the problem of inter-regional distribution of labor, which is the chief purpose of specializing production by regions. Thus, the question as to where, what, and in what quantities to produce, i. e., the question of a rational geographical distribution of the basic branches of agriculture, is the main problem in specializing agricultural production. Upon the solution of this problem, with the present state of socialization and with the present level of technique, depends the creation of a rational system of agriculture as a part of our national economy.

Specialization of agricultural production will take an important place among the various measures for the socialist reconstruction of agriculture. A rational distribution of the branches of agriculture alone should be greatly profitable to our national economy. The realization of higher agro-technical achievements as appled to a rational zoning of agriculture will produce a considerable increase in the productivity of labor and in the marketable agricultural surplus.

It is self-evident that the geographical distribution of the basic branches of agricultural economy not only establishes an inter-regional division of labor for the

immediate future, but also predetermines a number of general lines of development of the productive forces for a more extensive period. Every future has its beginnings in the present. From this point of view, the present specialization of farming along the line of inter-regional division of labor will have its significance for a much longer period. This must be all the more emphasized, since the distribution of the basic branches of agricultural economy in a considerable measure predetermines the location of the industrial establishments for working up agricultural raw materials subject to losses in weight (sugar beets, potatoes, dairy products, flax, oil seeds, etc.), which could not be transported to other districts in a relatively short period of time.

The specialization of agricultural production in geographical sections, in accordance with the distribution of the most essential branches of agriculture best adapted for one or another part of the Union, provides the foundation for establishing agricultural regions.

From this point of view, an agricultural region is considered to be a part of a planned and organized economy embracing a definite territory which, in accordance with its economic and natural conditions, is fulfilling the economic functions, on the basis of the socially planned division of labor, of producing agricultural products at the lowest cost and with the greatest productivity of labor. With such an understanding of an agricultural region, it will be necessary in the first stage to map out a relatively small number of region-zones all over the Union, taking into consideration their basic economic and natural conditions. Agriculture, being a branch of national economy which is called upon to convert the sun's kinetic energy into potential energy of organic substances,

depends on natural conditions, such as climate, soil, flora and fauna, inasmuch as the latter affect the degree of productivity of labor and the cost of production, with a given level of technique.

Within the boundaries of this small number of region-zones, there will be required the establishment of a basic inter-regional division of labor in the earliest stage, taking into consideration, as far as it is possible, the impending changes in economic development (electrification, industrialization, transportation, etc.). In accordance with this, for the mapping out of the basic agricultural zones and the distribution of the main branches of agriculture, the most important methodological premises are:

a) the social-economic nature of the national economy of the U. S. S. R.;

b) the leading part played by socialistic industry, which basically predetermines the development of the productive forces of the entire national economy, and of agriculture as a portion thereof;

c) the maximum utilization of the production possibilities in the direction of raising the quantity and quality of agricultural products with an increasing productivity and a reduction in costs;

d) the greatest satisfaction of the requirements of the national economy as regards grain, technical cultures, animal husbandry, gardening and horticulture, both for domestic consumption and for the needs of export.

e) an appraisal of the probable progress in the reconstruction of the national economy during the coming few years, and of the basic general lines of development of the productive forces of the national

economy of the Union, in accordance with the basic energy resources of the country.

On the basis of the foregoing, the method of mapping out the basic agricultural regions may be conceived as a method of planning production, originating from the tasks of the national economy, and with considerations of a national economic character. The criterion of a rational distribution should be such a disposition of the basic branches and cultures of agriculture as will result, from the point of view of the national economy, in the minimum production and transportation costs with the maximum productivity of labor. As one of the methods of checking the reasonableness of the accepted plan for the distribution of agriculture may be taken the estimated surplus agricultural production in comparison with the planned gross production, on the one hand, and the requirements of the national economy for agricultural products on the other.

In addition to the specialization in agricultural production, which is finding expression in a regional division of labor and is dictated by considerations relating to the national economy as a whole, *it is necessary to have in view specialization by types of production within the various regions.*

Inter-regional specialization is based upon certain types of agriculture which are the leading ones in the respective regions. It is obvious, however, that each region may have, in addition to the leading type of production, other forms of farming which are of secondary importance there. These are carried on in farm units of various types, which differ among themselves both in regard to the form and extent of specialization (production of a given type of farming,

single type of farming, or single crop) and in regard to their technical level. Thus, for instance, in the main grain regions of the southeast, there are found, alongside mixed grain and exclusively grain farms, also mixed and exclusively cattle farms, and combined cattle and wool-producing farms. Within each of these types there may be differences not only in regard to the nature of the predominating crop but also in regard to technical methods and to farm organization..

This is quite natural and unavoidable, inasmuch as there are economic and natural differences within the large agricultural regions as they have been mapped out for the purpose of inter-regional division of labor. Besides, the very variety of the existing social forms of farming—state farms, collective farms, and individual peasant holdings—also results in considerable differences. As a rule, each one of these social types of farming will differ from the other in regard to scale of production, technical standards, and degree of specialization.

In the first stage of specialization in agriculture, the differences in types of production will reflect the differences in social forms of farming and in economic and natural conditions.

Great variations in the economic and natural conditions within the large regions are bound to bring about a future subdivision into secondary regions. Together with the growth of socialization of agriculture, the differences in production types according to size of farms and degree of technique, which are conditioned at present by the social system, will to an ever-greater extent give way to differences which are dependent on various economic and natural conditions. This is evident, since large-scale socialized farming should pro-

duce socially-necessary products at least cost, taking into consideration transportation expenses, with the greatest productivity of labor, and with the highest returns on the investment. Socialized economy must orientate itself in accord with these standards. Consequently, in the proximity of big industrial centers and large cities, specialization in agricultural, as a rule, will develop in the direction of the production of perishable products which can be shipped only a short distance (vegetables, sweet milk, potatoes, etc.) to satisfy the local demand.*

In the measure that the socialized sector of agriculture expands, the technical division of labor will have to be extended within the sector among the separate specialized types of enterprises.

The type of such a technical division of labor may already be noted in the largest state grain and cattle farms. The grain farm, organized on the principle of exclusive specialization in grain raising, turns over its by-products (straw, chaff, inferior quality grain) to the state cattle farm, which has feeding points on the territory of the grain farm. In like manner it is possible to conceive of a coordination, on the principles of a technical division of labor, between a grain

*In agricultural production much attention is directed to the specialization of the existing means of communication: railroads, waterways, and highways. However, changes in the production map of the Soviet Union will inevitably necessitate the construction of new means of communication. In view of the existence of enormous unused land reserves well-suited for agricultural purposes and as a prerequisite for their utilization, there must take place a rearrangement of regions. This will lead to augmenting the importance of outlying regions and sections of the Soviet Union which have been made little use of agriculturally and industrially.

farm and a poultry farm, which would utilize the grain for the fattening-up of the poultry for market.

The organization of the main branches of agriculture in each region on the basis of highly specialized production, the establishment of mutual relations as between the separate specialized farms on the basis of a technical division of labor, the construction of plants for the working-up of agricultural raw materials—these constitute the basic prerequisites for the advent of very large agricultural-industrial combines. The latter are organized on the basis of a coordination of a number of branches, which are in their turn organized on the principle of a highly specialized production. Each branch, depending on the kind of production, is organized on the basis of greatest efficiency. The concentration of specialized farms around power-supplying centers and industrial establishments constitutes a gigantic step toward the establishment of agricultural-industrial combines, and, simultaneously, toward the elimination of the conflict between town and village.

Summarizing the general concepts of specialization in agriculture under conditions in the U. S. S. R. one can formulate the following theses:

1. At the foundation of specialized production in the various regions lies the rational allocation of the various branches of agriculture, founded upon socially planned division of labor in agricultural production, in accord with the condition the of national economy, with natural conditions and with the present level of technique.

2. Specialized production according to regions is based on the leading agricultural branches and crops and the subordination of supplementary branches and crops to them.

3. Within the regions specialized production is in accord with the prevailing types of farm production.

4. As regards certain special branches and crops it will be possible to conduct the farms on the basis of specialization in a single branch or one special crop. Among such branches may be included: fruit raising, truck gardening, viticulture, cotton raising, tea plantations, kendyr fields, large-scale poultry farms, dairy and hog farms which have to obtain feed elsewhere, sheep farms, cattle and grain farms.

In connection with specialization in agriculture there inevitably arises the question of a more rational distribution of the agrarian population. The distribution of the rural population in the past was determined by special economic and natural conditions, with technique at a low level. The new technique, with the socialized forms of farming and with the present social-economic conditions in the U. S. S. R., will call for a redistribution of the population in accord with the rational allocation of agricultural production, and not vice versa.

In accordance with the condition of the national economy, specialized production makes a number of demands in the way of industrial establishments for the working up of agricultural raw materials, transportation, mineral fertilizers, and various means of production.

On the basis of the plan, briefly outlined above, the entire Soviet Union is divided into nine regional zones, according to the basic trend of agriculture in each respective zone. These zones are shown on the inserted map.

These zones and the branches of agriculture to be specialized in are as follows:

1. *Northern Zone*—Deer raising and trapping of fur-bearing animals are the main lines of agriculture in this zone, which covers enormous stretches of the Siberian tundras.

2. *Lumber Zone*—Lumber industry and general agriculture, the latter holding a subordinate position.

3. *Flax and Dairy Products Zone*—This covers a considerable section of the non-black soil belt of the European part of the Soviet Union; the zone includes the southern part of the Northern Region, considerable sections of the northwestern and western territories, and the Ivanov Industrial and Nizhni Novgorod Regions. The basic function in national economy assigned to this zone is that of producing flax and dairy products.

4. *Dairy-Vegetable-Potato Zone*—This includes: (a) the large industrial regions near Leningrad; (b) a considerable part of the Central Industrial Region; (c) the industrial areas of the Urals; (d) the Donetz Basin and Dnepropetrovsk. The task of these regions is to supply the principal industrial areas of the country with dairy products, vegetables and potatoes. Of course, in addition to the above-mentioned regions specializing in dairy farming and the raising of vegetables and potatoes, near each important industrial center dairy and vegetable farms will be established. In connection with the rapid industrialization of Siberia, dairy-vegetable-potato sections will also be developed there. As a first step, it is necessary to form dairy and vegetable farms in the Kuznetz coal basin.

5. *Technical and Southern-Technical Cultures Zone*—The chief regions embraced in this zone are: the wooded steppes of the Ukraine, the southern part of White Russia, the Central Black Soil Region, the

northern section of the Middle Volga Region, and some districts of the pre-Urals. In addition it includes the following sections of the Soviet Union: the Black Sea coastal plain of the Ukraine, the northern part of the Crimea, the North Caucasian belt of adequate rainfall, the Akhtuba region (at the mouth of the Volga), the Far-Eastern coastal territories, a part of southern Kazakstan and the Kirghiz Autonomous Soviet Socialist Republic. All these sections of the Soviet Union are mainly engaged in the raising of the following industrial crops: sugar beets, hemp, soy beans, kenaf, sunflower seeds, etc. Fruit and vegetable raising is also carried on to some extent. The territories included in this zone are, with few exceptions, known for their relatively rich soil, sufficiency of precipitation and warm temperature, which make these lands the most favorable for agricultural development in the entire Union. Naturally, therefore, we have here great prospects for an increase in agricultural production, especially of industrial crops and also for the development of animal husbandry.

6. *Wheat and Stock Zone*—This is a large zone including the following: the Ukrainian steppes, a considerable portion of the Northern Caucasus (deficient in rainfall), practically all of the Middle and Lower Volga Regions, the wooded steppe and steppe regions of the Urals and Siberia, Northern Kazakstan, and part of the Far Eastern Region. The major portion of this zone consists of steppe areas which are either arid or deficient in rainfall. This zone, where the leading role is taken by grain culture (wheat and sweet corn), animal husbandry (cattle, hog and sheep raising,) likewise has enormous significance. The Ukrainian steppe and the Middle Volga Region, because of the extent of grain culture, offer very favorable pros-

pects for the raising of beef cattle and hogs; the Lower Volga Region, Kazakstan, and the steppe lands of Siberia offer good possibilities for the raising of beef cattle and sheep. The wooded steppe belt, in addition to grain raising, has favorable conditions for the development of dairy farming. Of the industrial crops in this wheat and livestock zone the leading position is occupied by the sunflower, while in the steppe portion of the Ukraine the leading culture is the soy bean.

7. *The Lumber—Flax—Oilseed Zone*—This zone embraces the forest area of the Urals and Siberia. Besides this the zone includes also a fairly large territory in the Yakut Soviet Socialist Republic along the Lena River and its tributaries. The combination of natural and economic conditions, after the land has been cleared of timber, gives this territory great possibilities for the extension of flax culture and the development of dairy farming.

8. *Desert-Pasture and Mountain Cattle Zone*—This covers the arid pasture-lands of Central Asia: Kazakstan, the Kirghiz Autonomous Soviet Socialist Republic, the Tadzhik Autonomous Soviet Socialist Republic, the Turkoman Soviet Socialist Republic, Uzbek Soviet Socialist Republic and mountain pasture-lands on the borders of Persia, Afghanistan, China, and Mongolia. This enormous belt—still largely unavailable for agricultural purposes because of insufficient precipitation and its mountainous condition—has immense areas, which have been utilized as yet to a very small extent, suitable for the raising of beef cattle, sheep, and goats on an extensive scale.

9. *Sub-tropical Plant Zone*—Tea, cork, tobacco, ramie, citrus fruit (tangerines, lemons, oranges) grapes, and cotton. This zone includes the southern-

most part of the Crimea, the Black Sea coast, the Lenkoran region, Georgia, Armenia, Azerbaidzhan, Daghestan, Central Asia, the cotton regions of Turkmenistan, Tadzhikistan, Uzbekistan, and the Kirghiz Republic. These regions, most favorable for the cultivation of southern and sub-tropical industrial crops, fruits, and grapes, represent only about 2-3 per cent of the arable land of the Soviet Union. Naturally, they must be utilized to the utmost extent along the lines of industrial crop production. All grain cultivation in these regions is being reduced to a minimum, and the raising of sub-tropical plants, fruits, and grapes is taking its place.

The demarcations of these zones have been determined, on the one hand, by the task of apportioning certain definite quantities of foodstuffs, raw materials, and agricultural exports for the Soviet Union as a whole, and, on the other hand, by the suitability of each of these regions for the raising of definite, socially necessary agricultural products at the lowest cost of production and transportation and with a view to attaining the highest possible technique in large-scale socialized agriculture and specialized production.

It is necessary briefly to examine these enumerated zones from the point of view of inter-regional division of labor and the resultant specialization in production.

On the basis of the projected apportionment of our arable land, crops, livestock, poultry, and on the basis of preliminary estimates we get the following:

1. Wheat production (spring and winter). About 83 per cent of the total commodity production (regional surplus) comes from the Wheat-Livestock Zone. This shows that the raising of this leading grain, both for domestic consumption and for export, falls

largely to the following regions: the Ukrainian steppe, the Lower Volga Region in part, the Middle Volga Region, the southeastern part of the Central Black Soil Region, the Nothern Caucasus, Siberia, the Urals, the northern part of Kazakstan, and the Far Eastern Region in part.

2) *Flax Fiber*—About 80 per cent of the total commodity production (regional surplus) is derived from the Flax-Dairy-Oil Seed Zone. Thus, commodity production of flax is concentrated in the non-black soil belt of the European U. S. S. R. and in Siberia.

3) *Cotton Fiber*—The major part of the total commodity production falls to Central Asia, in part to Transcaucasia, and to such new regions as the Northern Caucasus and the southern part of the Ukraine.

4) *Hemp*—Commodity production of hemp is confined largely to the south of our Western Region and to the northern part of the Ukrainian forest areas, in part to the Central Black Soil and the Middle Volga Regions. Taken together, these three regions, situated in the Industrial Crops zone, supply all the hemp for the market.

5) *Sunflower Seeds*—The commodity production of sunflower seeds is concentrated in the Ukrainian steppe, the Northern Caucausus Region, the Lower Volga Region, the southeastern section of the Central Black Soil Region, and partly in Siberia.

6) *Soy Beans*—Commodity production of this new crop, which has great possibilities, is concentrated in the Northern Caucasus in districts of sufficient precipitation, the Ukrainian steppe, and in the Far Eastern Region. These are the most favorable regions for its cultivation. According to the control figures, 80 per

cent of the total commodity production of soy beans is to be derived from these regions.

7) *Sugar Beets*—The predominant portion, about 90 per cent, of sugar-beet production falls to the northern wooded steppe, black soil belt of the Ukraine and the southwestern part of the Central Black Soil Region.

8) *Meat*—Commodity production of meat in the main (about 85 per cent) falls to the Northern Caucasus, Siberia, Kazakstan, the Ukraine, and the Far East.

9) *Eggs*—The major part of the commodity production of eggs is confined to the Ukrainian steppes, the Northern Caucasus, and Transcaucasia.

10) *Milk*—The major part of the commodity production of milk is confined to the regions of the Flax-Dairy-Oil Seed Zone of the non-black soil belt of the European U. S. S. R. and Siberia. To these regions falls approximately 72 per cent of the total commodity production of milk. These regions are destined to become the principal regions for butter production.

Broadly generalizing for the purpose of defining the basic features of the inter-regional division of labor among large sections of our agricultural economy, the following regions of the Soviet Union may be said to stand out more or less prominently: The vast sparsely-populated tundras in the northern part of European and Asiatic U. S. S. R. are devoted to deer-raising, fur-trapping, hunting, and, in part, to fishing. The large forest tracts which are found in the southern stretches of the tundras, both in the European and Asiatic section of the Soviet Union, constitute, in the main, lumber regions where agriculture is practiced only in scattered points principally along the river

banks. The role played by agriculture in these regions is relatively small. Its function is to furnish the lumber industry with commodities which can only be shipped a short distance and, in part, with fodder. The non-black soil belt of the European part of the Soviet Union is largely the producer of dairy products, flax, potatoes, in some parts pork, while in the industrial regions large quantities of vegetables and berries are produced.

The wooded steppe and steppe belts, taking into account the conditions of national economy in their sum total, are confined in the main to the production of industrial crops (sugar beets, sunflower, soya beans, etc.), grain-raising (wheat and sweet corn), in part to animal husbandry, mainly hogs and poultry. In the localities where industry is developing we find the growth of dairy and truck farming.

The wooded steppe and steppe belts have tremendous potentialities for fruit growing. The coast line of the Black Sea, Crimea, and some parts of the Ukrainian steppe offer good prospects for the development not only of fruit growing but also of viticulture.

That part of the Northern Caucasus which has sufficient rainfall constitutes a region for industrial crops, cattle and poultry raising.

The southeastern regions of the Soviet Union and Kazakstan are chiefly devoted to grain raising but also to the raising of beef cattle and sheep.

Transcaucasia and the irrigated regions of Central Asia are regions of industrial crops (cotton, kendyr, kenaf, etc.), of subtropical plants in Transcaucasia and fruit growing. In Transcaucasia, in the mountainous parts of Georgia, Azerbaidzhan, Daghestan, and Armenia, Alpine milch cows and sheep for wool and mutton are raised.

The wooded sections (urman) of Siberia are used for the production of flax, oilseeds, and grain; in the wooded steppe sections of Siberia for that of grain and oilseeds; in northern Kazakstan and in south-western Siberia for that of grain, meat, and wool.

In the Far Eastern Region along the shores of the Pacific Ocean (Khabarovsk and Vladivostok region) the chief products are grain (rice), soy beans, and dairy products; in the Blagoveshchensk region—grain, oilseeds, meat; in the Transbaikal and the Buryat Mongolian Republic—meat, wool, grain; in the sparsely-populated Yakut region along the Lena River—meat, oilseeds, and grain for local consumption; in the southern mountainous borderlands in the Asiatic part of the Soviet Union—meat, cheese, wool, and in certain localities furs.

This summary outline of the basic branches of agriculture carried on in each of the large sections of the Soviet Union gives an idea of the above-mentioned inter-regional division of labor in Soviet agriculture, which would seem to be a more or less rational solution for the immediate future.

On the basis of the territorial division of labor there will take place also a process of specialization in agriculture in accordance with the leading occupations of the different regions.

Thus, the distribution of the basic branches of agriculture among the various parts of the Union is being brought about with a consideration of the national economic requirements and conditions, the distribution of industries, transportation, etc., and the inherent conditions of the land—climate, soil. It is self-evident that the efforts toward agricultural specialization for the time being must aim to solve the immediate prob-

lems of the rationalized territorial distribution of the basic agricultural pursuits, in accordance with the above enumerated factors. The next stage in the solution of the problem of specialization in agriculture is connected with the projecting of the organizational-production forms of economy (state farms and collectives) adapted to the selected areas. This part of the undertaking must naturally take as its starting point the local tasks assigned for each region and the tasks imposed on the region from the point of view of the national economy.

END OF
TITLE